

Pascopyrum smithii - Bouteloua gracilis - Carex filifolia Herbaceous Vegetation

COMMON NAME	Western-Wheat Grass - Blue Grama - Threadleaf Sedge Herbaceous Vegetation
SYNONYM	Western Wheatgrass - Blue Grama - Thread-Leaved Sedge Prairie
PHYSIOGNOMIC CLASS	Herbaceous vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/semi-natural (V.A.5.N)
FORMATION	Medium-tall sod temperate or subpolar grassland (V.A.5.N.c.)
ALLIANCE	<i>Pascopyrum smithii</i> Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Upland

RANGE

Globally

This community is found in Colorado, Wyoming, Montana, North Dakota, South Dakota, and Saskatchewan. Details of its distribution within these states are not available.

Jewel Cave National Monument

This community is best developed in the bottom of Hell Canyon, on the ridgecrest in the southeast part of the Monument, and in the vicinity of the Pass Creek Road. Smaller stands occur elsewhere.

ENVIRONMENTAL DESCRIPTION

Globally

This community is found on flat or gently sloping terrain. Many stands are on floodplains or gentle valley slopes, others are on uplands (Hanson and Whitman 1938, Hansen and Hoffman 1988). The soils are clay loam, silt loam, or loam and usually deep and fertile. This community appears to be only in basins or other broad lowlands. It does not appear to be found in mountain valleys (Hanson and Dahl 1956, Jones 1992).

Jewel Cave National Monument

This community is best developed on flat to gentle slopes. Smaller stands occur elsewhere, most commonly in openings on wooded southerly slopes.

MOST ABUNDANT SPECIES

Globally

<u>Stratum</u>	<u>Species</u>
Herbaceous	<i>Bouteloua gracilis</i> , <i>Carex filifolia</i> , <i>Pascopyrum smithii</i> , <i>Schizachyrium scoparium</i> , <i>Stipa comata</i>

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<u>Stratum</u>	<u>Species</u>
Herbaceous	<i>Pascopyrum smithii</i> , <i>Poa pratensis</i> , <i>Psoralea argophylla</i>

DIAGNOSTIC SPECIES

Globally

Pascopyrum smithii, *Carex filifolia*, *Bouteloua gracilis*, *Buchloe dactyloides*

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Jewel Cave National Monument
Pascopyrum smithii

VEGETATION DESCRIPTION

Globally

This community is dominated by medium and short graminoids. Total vegetation cover is usually high (Hanson and Dahl 1956, Hansen et al. 1984.) The midgrass stratum is dominated by *Pascopyrum smithii*. Common associates include *Koeleria macrantha*, *Stipa comata*, and *Nassella viridula*. *Stipa comata* is more common on the upper slopes and drier upland sites while *Nassella viridula* is more common on the lower slopes and floodplains. Short graminoids are very abundant in this community. The most common are *Bouteloua gracilis* and *Carex filifolia*. Other upland sedges, such as *C. inops* ssp. *heliophila*, *C. eleocharis*, and *C. pensylvanica* are usually found with these. Forbs do not contribute much of the canopy cover but they are scattered throughout this community. Typical forbs are *Astragalus* spp., *Tragopogon dubius*, *Gaura coccinea*, *Hedeoma hispida*, *Lappula occidentalis*, and *Sphaeralcea coccinea*. Shrubs are a very minor component of the vegetation. The half-shrub *Artemisia frigida* is often present and some stands contain *Artemisia cana*, *Opuntia* spp., or *Symphoricarpos occidentalis*.

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Herbaceous cover for this community was estimated between 25 and 75%. *Pascopyrum smithii* was found consistently. Other consistently-present graminoids include *Nassella viridula* and *Poa pratensis*. *Bouteloua gracilis* was a significant component in one stand but absent from another. Small stands of *Symphoricarpos occidentalis* are often present.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G4

RANK JUSTIFICATION

DATABASE CODE C EGL001579

COMMENTS

Globally

Fire was likely a common event in this type historically.

This type was described from communities named as *Pascopyrum smithii* - *Bouteloua gracilis* or *Pascopyrum smithii* - *Carex filifolia*. It is unclear whether the *Pascopyrum smithii* - *Bouteloua gracilis* Herbaceous Vegetation overlaps with these descriptions.

REFERENCES

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